Comments of the Southwest Energy Efficiency Project (SWEEP)

Environmental Portfolio Standard (EPS) Workshops
Before the Arizona Corporation Commission
March 4, 2004

The Southwest Energy Efficiency Project (SWEEP) appreciates the opportunity to provide the following comments and recommendations on energy efficiency and demand side management (DSM) as part of the EPS workshops. SWEEP's comments focus on issue #3, Restoration of DSM Funding, plus additional actions the Commission should take to increase energy efficiency, resulting in lower total costs for customers, a more diverse and less risky energy resource mix, and reduced damage to the environment.

SWEEP is a public interest organization dedicated to advancing energy efficiency in six southwestern states. SWEEP works on state energy legislation, analysis of energy efficiency opportunities and potential, utility and state energy efficiency programs, building energy codes and appliance standards, and voluntary partnerships with the private sector to advance energy efficiency. SWEEP is funded primarily by foundations, the U.S. Department of Energy, and the U.S. Environmental Protection Agency.

Summary of SWEEP Recommendations

SWEEP recommends that the Commission:

1. Increase energy efficiency in Arizona to provide cost-effective benefits for consumers, businesses, the electric system, the economy, and the environment.

2. As an important first step in the right direction, restore DSM funding to mid-1990's levels, now, as part of the EPS workshop process. Restoring DSM funding to mid-1990's levels now would be a valuable incremental step towards increasing energy efficiency, and the restored funds could be used to begin the ramp up to the higher levels of energy efficiency activity that SWEEP has recommended.

3. Take additional action to pursue cost-effective energy efficiency resources by setting energy savings goals for utility service territories, and by implementing energy efficiency programs with adequate funding to achieve the goals.

4. Increase natural gas energy efficiency by implementing or expanding policies, goals, and programs, parallel to Commission actions for electric energy efficiency.

5. Support energy efficiency and renewables as complementary clean energy resources.

6. Act in a timely manner to increase energy efficiency in Arizona.

These recommendations are discussed below.

SWEEP Comments and Recommendations

1. Increase energy efficiency in Arizona to provide cost-effective benefits for consumers, businesses, the electric system, the economy, and the environment.

When compared to central generation and transmission, energy efficiency is more cost effective, much cleaner with substantial environmental benefits, more distributed with no need for transmission or distribution, more diverse, less risky in terms of market and fuel price volatility, not reliant on fuel supplies or natural gas pipeline infrastructure, and less subject to security risks and interruptions. Energy efficiency programs provide financial and other benefits to consumers and businesses, and they create jobs and improve the economy.

Energy savings from energy efficiency programs cost less than other resources for meeting Arizona's energy needs. The total cost for energy efficiency savings is 2 to 3 cents per lifetime kWh saved, delivered to the customer.[1] This is less than the cost of conventional generation, transmission, and distribution, and significantly less than the total delivered cost of energy from new natural gas-fired plants.

2. As an important first step in the right direction, restore DSM funding to mid-1990's levels, now, as part of the EPS workshop process.

Restoring DSM funding to mid-1990's levels now would be a valuable incremental step towards increasing energy efficiency in Arizona. Restoration would result in annual DSM funding estimated to be about $9-11 million total (about $3 million for TEP and about $6-8 million for APS[2]) compared to about $2 million in annual expenditures currently.[3] Restored DSM funds could be used as additional funding now to begin the ramp up to the higher levels of energy efficiency activity that SWEEP has recommended.

While restoring DSM funding is an important and valuable step, the resulting funding level would be insufficient to capture the large quantities of cost-effective energy efficiency available in Arizona. Therefore, consumers and businesses would not receive all of the benefits of energy efficiency summarized in SWEEP's comments, and the total cost of energy service for utility customers would be higher. SWEEP recommends additional Commission actions, as described below.

If DSM funds are restored, SWEEP also recommends that the Commission ensure adequate funding for the existing EPS.

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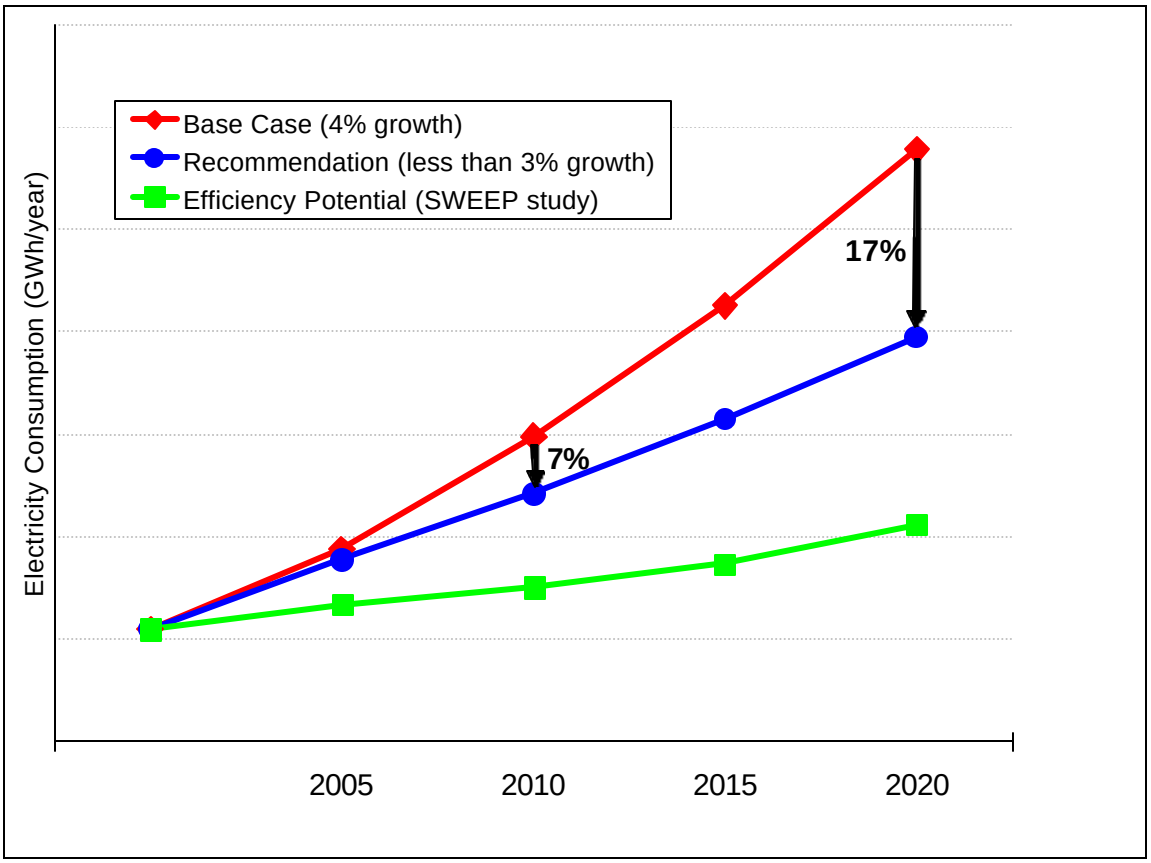
[1] As discussed later in SWEEP's comments, the utility/SBC cost for energy efficiency savings is 0.5 to 2 cents per lifetime kWh saved.

[2] The amount of APS DSM funding depends on how the Commission accounts for solar energy funding that was authorized as part of the EEASE fund in the mid 1990's, and the accounting for APS DSM staff expenditures during that period. DSM funding for UES would be in addition to the TEP amount.

[3] APS and TEP are each spending about $1 million on DSM currently, based on reports from APS and TEP in the DSM workshops.

3. Take additional action to pursue cost-effective energy efficiency resources by setting energy savings goals for utility service territories, and by implementing energy efficiency programs with adequate funding to achieve the goals.

SWEEP recommends that the Commission set goals to achieve 7% of total energy resources needed to meet retail load in 2010 from energy efficiency, and 17% in 2020. The Commission should set parallel goals to reduce summer peak demand by at least 7% of total capacity resources needed to meet retail peak demand in 2010, and at least 17% in 2020. These goals are reasonable and realistic as demonstrated by the significant cost-effective savings captured in other states. Achieving the goals would still capture only about half of the cost-effective energy efficiency potential in Arizona estimated in the SWEEP New Mother Lode study.



Achieving such goals would reduce average annual growth in retail energy and summer peak demand from about 4% to under 3%, eliminate the need for at least 2,500 MW of new power plants by 2020 and associated power line and pipeline infrastructure, save consumers and businesses over $2.7 billion during 2004-2020, reduce electricity price spikes and the risks of natural gas price volatility, and reduce emissions.

SWEEP recommends that the Commission authorize adequate funding to achieve the energy efficiency goals. SWEEP estimates that energy efficiency funding of $0.0015 per kWh of retail energy sales (1.5 mills) is necessary to achieve the goals. This funding level would result in 2006 energy efficiency budgets of about $41 million for APS and about $15 million for TEP. Energy efficiency funding in 2004 and 2005 should ramp up in stages to these levels as energy efficiency activities are increased and programs are implemented.

Energy efficiency programs encourage and leverage customer investment in energy efficiency. Participating customers who implement energy efficiency measures pay a significant portion of the costs, and the entire utility system benefits from the investment. The average utility/SBC cost for energy efficiency savings is 0.5 to 2 cents per lifetime kWh saved, much lower than other investments made in the utility system to serve customer energy needs.

SWEEP plans to provide additional information and recommendations in its comments on the DSM Workshop Report later this month. The DSM Workshop Report is being prepared by Staff, and it is scheduled to be submitted to the Commission in mid-March.

4. Increase natural gas energy efficiency by implementing or expanding policies, goals, programs, and funding mechanisms, parallel to Commission actions for electric energy efficiency.

While the EPS workshops and some other proceedings at the Commission are focusing on electricity, it is also important to increase natural gas energy efficiency. Natural gas energy efficiency has been included in the DSM workshop discussions to date, and the Commission should implement and expand policies and programs to increase natural gas energy efficiency in the near future.

5. Support energy efficiency and renewables as complementary clean energy resources.

Energy efficiency and renewables are complementary clean energy resources and both should be promoted and supported by the Commission. Therefore, in addition to increasing energy efficiency, SWEEP recommends that the Commission fully fund the existing EPS and develop an expanded portfolio standard to accelerate the adoption of solar energy and other renewable energy resources.

6. Act in a timely manner to increase energy efficiency in Arizona.

Each day that passes without effective energy efficiency programs results in more inefficient load being added to the electric and natural gas systems in this high load

growth state, leading to higher total costs for customers, a less diverse and riskier energy resource mix, and increased damage to the environment.

Conclusion

SWEEP congratulates the Commission for its leadership and prior actions to support clean energy policies and programs in Arizona. SWEEP encourages the Commission to continue that leadership by implementing and expanding policies and programs to increase energy efficiency and accelerate the adoption of renewable energy resources.

Thank you for the opportunity to submit these comments in the EPS workshops.

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